

Annual Drinking Water Quality Report

WESTERN REGION ALLEGANY DISTRIBUTION CENTER

MD001-0009 Western Region (Frostburg)

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of the drinking water used by
WESTERN REGION ALLEGANY DISTRIBUTION SYSTEM is purchased Surface Water.

For more information regarding this report contact:

Mark Yoder
301-777-5933 ext. 209

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA'S Safe Drinking Water Hotline at (800)-426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDs or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant woman and young children. Lead in drinking water is primarily from material and components associated with service lines and home plumbing. We cannot control the variety of material used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about the lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC-MD0010008-TPO1	PURCHASED-MD0010008 SW	SW	N

Also see City of Frostburg Water Quality Report

2016 Regulated Contaminants Detected

Water Quality Test Results

Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Contaminant Level or MCL:	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health, MRDLGs do not reflect the benefits to the use of disinfectants for control of microbial contaminants.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
na:	not applicable
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine		0.01	0-0.1	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Haloacetic Acids

(HAA5)*	24	9.59-29.5	No goal for the total	60	ppb	Y	By-product of drinking water disinfection
----------------	-----------	------------------	----------------------------------	-----------	------------	----------	--

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Total Trihalomethanes (TTHM)	75	22.81-104.31	No goal for the total	80	ppb	N	By-product of drinking water disinfection
---	-----------	---------------------	----------------------------------	-----------	------------	----------	--

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.



City of Frostburg

2016 Drinking Water Quality Report

PWSID: 001-0011

Important Information Concerning Your Drinking Water:

We're pleased to present to you the Annual Water Quality Report for 2016. This report is designed to inform you about the water quality and services we deliver to you every day. Maryland Environmental Service, an Agency of the State of Maryland, began operating the water treatment facility in January 2002 and prepared this report on behalf of the City of Frostburg.

The Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA). The SDWA sets regulations and guidelines for how public water systems operate, identifies several hundred drinking water contaminants and establishes monitoring frequencies and limitations. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA and routinely conducts sanitary surveys, inspections and monitoring for all public water systems. MES provides safe, dependable operations of the water system and is dedicated to consistently providing high quality drinking water that meets or exceeds the SDWA standards.

If you have any questions about this report or have questions concerning your water utility, please contact **Jay Janney** at 410-729-8350, e-mail jjann@menv.com.

**Stay Informed
on Water
Quality**

Public Meeting Information:

For the opportunity to ask more questions or participate in decisions that may affect your drinking water quality, the City Council meets on the third Thursday of each month at 7:00 p.m. at the Frostburg Community Center.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Inside This Issue:

Definitions	2
Special Points of Interest	2
Water Quality Report	3
Lead in Drinking Water	4
Sources of Drinking Water	4
Water Security	4

The Maryland Environmental Service operates and maintains the water treatment facility for the City of Frostburg. The facility is rated to treat 3.0 million gallons per day (MGD) and currently averages 1.2 MGD. The Frostburg water treatment facility receives raw water from numerous sources. MES maintains 25 springhouses with related collection and transmission equipment, and two deep wells in the Pocono aquifer. The balance of raw water is pumped from the Piney Dam reservoir in Garrett County. All raw water sources are commingled in a one million gallon supply reservoir which feeds the water treatment facility. The raw water is treated using a surface water treatment plant which consists of four basic components: coagulation, flocculation, sedimentation and filtration. These processes are specifically designed to treat the water at Frostburg. The treated water is stored in 2 finished water reservoirs. The last steps of treatment include the addition of Chlorine for disinfection, fluoride for dental protection and a corrosion inhibitor to help maintain the distribution system.

The Maryland Environmental Service provides personnel who are properly trained and licensed to operate and maintain the water treatment facility and related equipment in accordance with all applicable regulations. The operational tasks include daily visits to the water treatment facility, checking the facility, performing daily process testing, performing daily, weekly, and monthly calibrations/maintenance, performing all outside grounds maintenance, and continuing on-going quality control and preventative maintenance programs. The Maryland Environmental Service procures all necessary supplies and materials outlined in the operating budget for the efficient control of treatment, compiles and submits all reports required by Local, State, and Federal Regulatory Agencies and provides response 24 hours per day in the event of emergency situations such as an equipment malfunction.

Special points of interest:

- The water at Frostburg is tested for over 100 different compounds.
- The City of Frostburg's Drinking Water met all of the State and Federal requirements.

Definitions:

- **Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Action Level** - The concentration of a contaminant which, if exceeded, triggers treatment of other requirements which a water system must follow.
- **Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.
- **Turbidity** - Relates to a condition where suspended particles are present in the water. Turbidity measurements are a way to describe the level of "cloudiness" of the water.
- **NTU - Nephelometric Turbidity Units**. Units of measurement used to report the level of turbidity or "cloudiness" in the water.
- **ppb - Parts per billion or micrograms per liter.**



City of Frostburg Treated Water Quality Report 2016

	Highest Level Allowed	Highest Level	Ideal Goal
Contaminant	EPAs MCL	Detected	(EPA's MCLG)
Regulated at the Treatment Plant			
Nitrate	10 ppm	1.00 ppm	10 ppm
Typical Sources of Contaminant: Runoff from the use of fertilizer			
Fluoride	4.0 ppm	0.173 ppm	4.0 ppm
Typical Sources of Contaminant: Added for dental protection			
Barium	2 ppm	0.0573 ppm	2 ppm
Typical Sources of Contaminant: Erosion of natural deposits			
Regulated in the Distribution System	EPAs MCL	Detected	(EPA's MCLG)
Total Trihalomethanes (TTHM)	80 ppb	(Range 40 - 69)* 51 ppb**	N/A
Haloacetic Acids (HAA5)	60 ppb	(Range 13 - 25)* 19 ppb**	N/A
Typical Source of Contaminants: By-product of drinking water disinfection			
* Highest Individual Result from a Single Location			
** Four monitoring sites are individually averaged and reported quarterly. Compliance is determined on a Locational Rolling Annual Average (LRAA) of the individual sites. Value reported is the highest LRAA during 2016.			
Treatment Technique			
Turbidity	TT=filtration 0.3 NTU (Range 0.013- 0.121) Average 0.029 NTU		
Typical Source of Contaminant: Soil Runoff			
Turbidity cannot exceed 1.0 NTU and must be less than or equal to 0.3 NTU taken each month- in at least 95% of the measurements.			
The water plant consistently met all of the turbidity requirements in 2016.			
Regulated at the Consumer's Tap	Action Level	Detected	(EPA's MCLG)
Copper - (2015 Testing)	1.3 ppm	0.01 ppm	1.3 ppm
Lead - (2015 Testing)	15 ppb	0.00 ppb	0.0 ppb
Typical Source of Contaminant: Corrosion of household plumbing			

The table above lists all the drinking water contaminants that were detected during the 2016 calendar year. The presence of these compounds in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 – December 31, 2016. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some compounds. The presence of these compounds does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA's) Safe Drinking Water Act Hotline (1-800-426-4791)

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain compounds in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Remember:

Always keep on hand a three-day supply of water for each member of your household.

Source Water Assessment

The Maryland Department of the Environment completed a source water assessment. You may read this source water assessment by contacting the City office.

Water Security is Everyone's Responsibility

Water system security continues to be an enormously important issue. If you notice suspicious activities in or around local water utilities, such as persons cutting or climbing facility fencing, loitering, tampering with equipment or other similar activities, please contact your local law enforcement agency immediately by dialing 911.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Frostburg is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Thank you for another great year of Water Quality!



MARYLAND
ENVIRONMENTAL
SERVICE